


WHAT IS CLAIMED IS:

1. A method of lapping a medium-opposing surface in a thin-film magnetic head, the method comprising the steps of:

5 ~~preparing~~<sup>providing</sup> the thin-film magnetic head formed on a support, the thin-film magnetic head comprising a magnetoresistive device for reproducing, an inductive electromagnetic transducer for writing, and a heater for generating heat when energized; and

10  polishing a medium-opposing surface of the thin-film magnetic head while energizing the heater. ~~to~~ expand the

2. A method of lapping a medium-opposing surface in a thin-film magnetic head according to claim 1, wherein the magnetoresistive device, inductive electromagnetic transducer, and heater are laminated successively from the support side in the thin-film magnetic head.

15 3. A method of lapping a medium-opposing surface in a thin-film magnetic head according to claim 1, wherein the heater is disposed on a surface of the thin-film magnetic head opposite from the support.

20 4. A method of lapping a medium-opposing surface in a thin-film magnetic head according to claim 1, the method comprising the steps of:

25 cutting the support so as to form a bar including thin-film magnetic heads arranged in a row; and

the  
net area  
over  
overcoat  
layer  
and the  
expanded  
surface.

polishing medium-opposing surfaces of the thin-film magnetic heads in the bar while energizing the heater.

5        5.     A method of lapping a medium-opposing surface in a thin-film magnetic head according to claim 4, the method comprising the steps of:

electrically connecting a plurality of heaters of the thin-film magnetic heads to each other; and

10        polishing the medium-opposing surfaces of the thin-film magnetic heads while energizing all the heaters in the bar with a single power supply.

15        6.     A method of lapping a medium-opposing surface in a thin-film magnetic head according to claim 4, wherein a plurality of heaters of the thin-film magnetic heads in the bar are energized individually.

7.     A method of lapping a medium-opposing surface in a thin-film magnetic head according to claim 1, the method comprising the steps of:

20        cutting the support so as to form a bar including thin-film magnetic heads arranged in a row;

cutting the bar so as to form a plurality of head sliders each having a thin-film magnetic head;

mounting the head slider to an arm member so as to form a head gimbal assembly; and

25        polishing the medium-opposing surface of the thin-film magnetic head in thus obtained state while

energizing the heater.

8. A method of lapping a medium-opposing surface in a thin-film magnetic head, the method comprising the steps of:

5 ~~preparing~~ <sup>providing</sup> the thin-film magnetic head formed on a support, the thin-film magnetic head comprising a magnetoresistive device for reproducing and an inductive electromagnetic transducer for writing; and

10 polishing a medium-opposing surface of the thin-film magnetic head while energizing the electromagnetic transducer — <sup>to produce an heating effect,</sup>

9. A method of lapping a medium-opposing surface in a thin-film magnetic head according to claim 8, the method comprising the steps of:

15 cutting the support so as to form a bar including thin-film magnetic heads arranged in a row; and

polishing medium-opposing surfaces of the thin-film magnetic heads in the bar while energizing the electromagnetic transducer.

20 10. A method of lapping a medium-opposing surface in a thin-film magnetic head according to claim 9, the method comprising the steps of:

25 electrically connecting a plurality of electromagnetic transducers of the thin-film magnetic heads to each other; and

polishing the medium-opposing surfaces of the